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## **ABSTRACT**

A system and method for testing the upstream channel of a cable modem system. A tester generates a known test pattern and transmits the pattern to the Cable Modem Termination System (CMTS). If there are errors in the packet resulting from the upstream channel, the CMTS discards the packet based on standard Internet Protocol. If there are no errors the packet is returned on the downstream channel to the tester. The tester counts all returned test packets received including test packets with errors resulting in the downstream. Packets with errors are not discarded as they normally would be, but are checked for a portion of the repeating test pattern and checked for the correct number of bits of a test packet. All packets determined to be test packets, including those with errors, are counted over a period of time and compared to the number of packets originally sent. From this information the performance of the upstream channel can be inferred. Preferably the tester calculated Block Error Rate and Lost Packets based on the number of packets returned compared to the number originally sent.